



DOCUMENTATION

Classification	ABS (American Bureau of Shipping)
Year Built	2010
Keel Laid Year	2008
Place of Build	Singapore
Vessel Type	A1, Towing Vessel, Fire Fighting Vessel, Class1, Offshore Support Vessel AH, (E), AMS, DPS-2
Port of Registry	Majuro
Flag	Marshall Island
Official No.	6989
Call Sign	V7TV4
IMO No.	9505259

TOWING & ANCHOR HANDLING

Crane	N/A
Anchor Handling / Towing Winch	1 x ROLLS-ROYCE LBFM 64038
Tugger Winch	2 x Brattvag LAKMX22.010, capacity 10T
Winch Type	Double-Drum Waterfall
Windlass	1 x Brattvag LBFMG 41-38 hydraulic comb Windlass/mooring type
Anchors	2 x AC 14 high holding powers @ 1610Kg 2
Anchor Chain	2 x 12 shackles U3 Stud link 42 mm dia
Chain Chaser	1 x 110T SWL, J type chain chaser
Grapnel Anchor	1 x 100T SWL 4 prong
Towing Pins	1 x Triplex Guide Pin S-200, 200 tons SWL
Shark Jaws	1 x Triplex H200 Series
Stern Roller	4.40m x 1.80m x 180m SWL
Spare Tow Wire	1 x 1000m of 52mm dia wire rope
Capstans	2 x Brattvag L.CX22009 @ capacity 5.2T pull at 0 - 19 m/min
Storage Reels	3 x Brattvag LALMX2205
Line Pull	150T
Wire Rope	1 x Brunton Wire Rope (52mm x 1000m) steel wire rope
Cable Lifter	3" & 3.5" rig chain
Rated Pull	SWL 200 Tons
Brake Holding Load	172 T
Drum Capacity	1000m (@dia 52mm)
Winch Wire Capacity	1200m x 52mm diameter wire rope
Chain Stoppers & Wire	1 x Triplex Shark's Jaw H-200 200 tons SWL for 3 1/2" chain and wire

PERFORMANCE

Max Speed	14 knots	16 m ³ /day
Service Speed	12 knots	13 m ³ /day
Economic Speed	8 knots	8 m ³ /day

DELIVERY RATES

Fuel Oil	100m ³ / hr 80m head
Fresh Water	100m ³ / hr 80m head
Drill Water	100m ³ / hr 80m head
Liquid Mud	80m ³ / hr 60m head
Brine	150m ³ / hr 80m head
Dry Bulk / Cement	63000 ft ³ /hr 5.6 bar / 1500 M3-5.6 bar

MAIN PARTICULARS

Length Overall	63 m	206.69 ft
Length BP	55.80 m	183.07 ft
Moulded Breadth	14 m	45.93 ft
Moulded Depth	6.60 m	21.65 ft
Draft (max)	5.5 m	18.04 ft
Draft (operational)	4.5 m	14.76 ft
Bollard Pull	82.50 T	
Brake Horsepower	6400 BHP	
GRT / NT	1986 T / 591 T	
Lightship Weight	19931.13T	19591.55 lt
Deadweight	1545.87 T	1519.45 lt

CARGO DECK

Deck Strength	10T / m ²	
Deck Cargo Tonnage	800 T	2.25 Lt/m ²
Clear Deck Area	432 m ²	4650.00 ft ²
Deck Length	36 m	118.11 ft
Deck Width	12 m	9.37 ft

MACHINERY

Main Engine	2 x Yanmar 8N 280M-EV @ 3,200 BHP x 720RPM
Propellers	2 X Kawasaki Rexpeller, KST 240 ZC/A CPP
Propulsion	Azimuth Stern Drive (Rexpeller)
Gearbox	
Main Propulsion Type	Azimuth Stern Drive/Kawasaki Rexpeller
Auxiliary Engines	3 x CAT 3412C DITA + 2 x CAT 3408C DITA + 1 x CAT 3406C DITA
Main Generator	3 x 590 kW + 2 X 370 kW + 1 x 320 kW + 1 x 77 kW, all generators 240/440V, 3 phase, 60hz
Emergency Generator	1 x CAT C4.4 DINA, 76kW
Main Alternator	
Azimuth Stern Drive	2 x Kawasaki Rexpeller KST 220 ZC/A
Bow Thruster	2 x Kawasaki KT-72B3CPP x 500 kW x 7.7T lateral thrust
Transverse Thruster	2 x Kawasaki KT-72B3CPP
Rudders	Azimuth Stern Drive (Rexpeller)
Steering Gear	2 x Kawasaki KST-220ZC/A

*Particulars are believed to be correct but not guaranteed. All figures given are approximate only. Owners reserve the right to amend the specifications without notification.

CAPACITY

Fuel Oil	747 m ³	197,336.48 USG
Fresh Water	240 m ³	63,400 USG
Drill /Ballast Water	357 m ³	94,309.20 USG
Liquid Mud	338 m ³	89,290.14 USG
Brine	357 m ³	94,309.20 USG
Dry Bulk	169 m ³	5,968.18 ft ³
Dispersant	16 m ³	4,226.75 USG
Lube Oil	2 x 8.62 m ³	4,554.32 USG
Dirty Oil	7.55 m ³	1,994.50 USG
Hydraulic Oil	7.25 m ³	1,915.25 USG
Bilge Holding Tanks	7.55 m ³	1,994.50 USG
Sewage Tank	11.0 m ³	2,905.89 USG
Foam	16 m ³	4,226.75 USG

ACCOMMODATIONS

Upper Forecastle Deck	2 x 1 Man, 1 x 2 Men, 2 x 4 Men
Forecastle Deck	5 x 4 Men, 3 x 2 Men, 1 x Ship's Office Lounge
Main Deck	Main Mess: 20 1, 1 x Galley
Hospital	1
Total	38 berths

*All cabins are fully air-conditioned, complying with ILO 92, IMO Resolution A468 (XII)

SAFETY EQUIPMENT

Fifi Claas (Yes or No)	Yes
Life Rafts	6 x 25 Men; inflatable
Fast Rescue Boat	1 x Seabear 23MKII, Aluminum Hull, 10 Person with 230 Hp Diesel Engine and Water Jet, and Davit Launching
Life Buoys	10 Ring Buoys c/w lights and cordage
Life Jackets	62 x Rigid Life Jackets & 12 x Inflatable Life Jackets
Scrambling Nets	2 x Polypropylene mesh safety scramble net filled with wood end spreader bar on ends. (size 7.0m x 4.0m) mesh size 200mm, mesh rope dia 18mm
Rescue Zones	Port and Starboard clearly marked at forward main deck 2 meters wide gate opening
FRC Davit	1 x TTS Marine K.5547 Series
Fire Pump	2 x 1500 m ³ /Hr @ 15 bar, 150m height
Fire Monitors	2 x 1200 m ³ /Hr. @ 11 bar water monitors
Fire Extinguishers	CO2 flooding system in Engine room comp
Fire Station	12 complete with hoses and nozzles
Spray Boom	2 x 5 m port/starboard fitted with flat nozzles 40 degrees spray angle
Searchlights	1 x Fwd & 2 x Aft

ELECTRONICS & CONTROLS

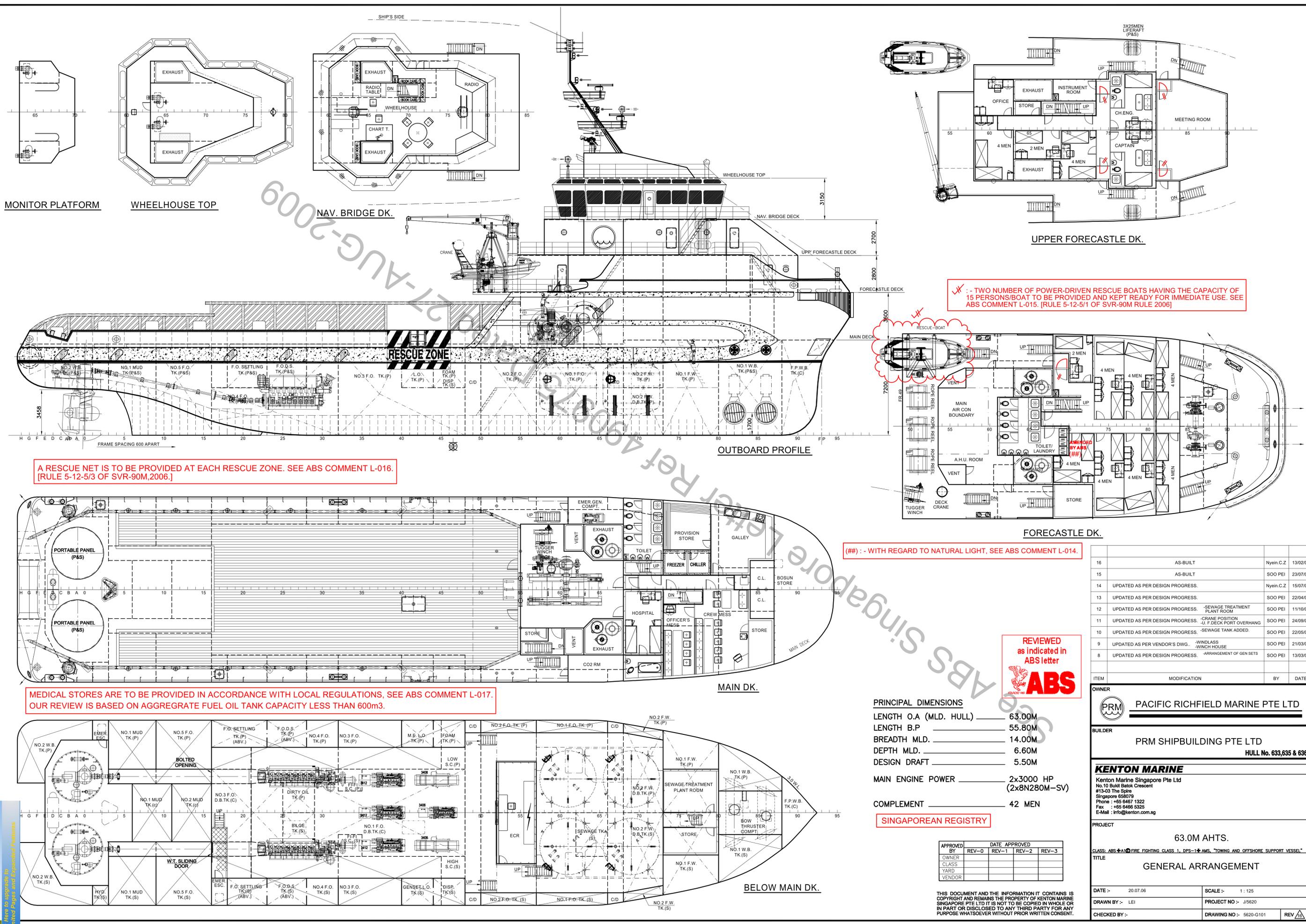
Radar	1 x Koden MDC 7912P/7925P Series – X band
Radar 2	1 x Koden MDC 2040/2041 Series – S band
Gyrocompass	3 x Sperry Marine Gyro Navigat MK1, Mod 7 type E, GGG-TMC + 4 Repeaters
DGPS	2 x Kongsberg DPS 114 – 112 Series
AIS	1 x Samyung S1-30A
Echo Sounder	1 x Sperry Marine ES 5100-01
Auto Pilot	Simrad – AP80 AUTO PILOT
SSB	1 x Sailor
VHF	2 x Sailor RT5022 VHF-DSC
NAVTEX Receiver	1 x Samyung SNX-300
GMDSS	1 x Sailor 5000 GMDSS 250W W. D1
INMARSAT C	1 x Sailor Cobham 6018
EPIRB	1 x NSR – NEB 2000
SART	2 x Samyung SAR-9
Speed Log	1 x Sperry Marine Navikot 350 E
Public Address System	Vingtor, SPA-MGM
ECDIS	1 x Sperry Marine 65934AA
PA System	1 x Phontech DICS 6100
Weather Facsimile	1 x Sperry Marine

DP SYSTEM

DP2 - KONGSBERG K-Pos DP-21
Independent Joystick - KONGSBERG
Reference System - 1 x Fan Beam, 2 x DGPS, 3 x Gyro, 3 x VRU, 3 x Wind Sensor

This specification is preliminary and subject to change without notice. Exact tank capacities, deadweight, deck cargo capacity and other figures that have been calculated and may change when the actual vessel is delivered.

*Particulars are believed to be correct but not guaranteed. All figures given are approximate only. Owners reserve the right to amend the specifications without notification.



MONITOR PLATFORM

WHEELHOUSE TOP

NAV. BRIDGE DK.

UPPER FORECASTLE DK.

OUTBOARD PROFILE

FORECASTLE DK.

MAIN DK.

BELOW MAIN DK.

A RESCUE NET IS TO BE PROVIDED AT EACH RESCUE ZONE. SEE ABS COMMENT L-016. [RULE 5-12-5/3 OF SVR-90M,2006.]

W : - TWO NUMBER OF POWER-DRIVEN RESCUE BOATS HAVING THE CAPACITY OF 15 PERSONS/BOAT TO BE PROVIDED AND KEPT READY FOR IMMEDIATE USE. SEE ABS COMMENT L-015. [RULE 5-12-5/1 OF SVR-90M RULE 2006]

(##) : - WITH REGARD TO NATURAL LIGHT, SEE ABS COMMENT L-014.

MEDICAL STORES ARE TO BE PROVIDED IN ACCORDANCE WITH LOCAL REGULATIONS, SEE ABS COMMENT L-017. OUR REVIEW IS BASED ON AGGREGATE FUEL OIL TANK CAPACITY LESS THAN 600m3.



PRINCIPAL DIMENSIONS

LENGTH O.A (MLD. HULL)	63.00M
LENGTH B.P	55.80M
BREADTH MLD.	14.00M
DEPTH MLD.	6.60M
DESIGN DRAFT	5.50M
MAIN ENGINE POWER	2x3000 HP (2x8N280M-SV)
COMPLEMENT	42 MEN

SINGAPOREAN REGISTRY

APPROVED BY	DATE APPROVED			
	REV-0	REV-1	REV-2	REV-3
OWNER				
CLASS				
YARD				
VENDOR				

THIS DOCUMENT AND THE INFORMATION IT CONTAINS IS COPYRIGHT AND REMAINS THE PROPERTY OF KENTON MARINE SINGAPORE PTE LTD IT IS NOT TO BE COPIED IN WHOLE OR IN PART OR DISCLOSED TO ANY THIRD PARTY FOR ANY PURPOSE WHATSOEVER WITHOUT PRIOR WRITTEN CONSENT.

ITEM	MODIFICATION	BY	DATE
16	AS-BUILT	Nyein.C.Z	13/02/09
15	AS-BUILT	SOO PEI	23/07/08
14	UPDATED AS PER DESIGN PROGRESS.	Nyein.C.Z	15/07/08
13	UPDATED AS PER DESIGN PROGRESS.	SOO PEI	22/04/08
12	UPDATED AS PER DESIGN PROGRESS. -SEWAGE TREATMENT PLANT ROOM	SOO PEI	11/10/07
11	UPDATED AS PER DESIGN PROGRESS. -CRANE POSITION -J. F. DECK PORT OVERHANG	SOO PEI	24/09/07
10	UPDATED AS PER DESIGN PROGRESS. -SEWAGE TANK ADDED.	SOO PEI	22/05/07
9	UPDATED AS PER VENDOR'S DWG. -WINDLASS	SOO PEI	21/03/07
8	UPDATED AS PER DESIGN PROGRESS. -ARRANGEMENT OF GEN SETS	SOO PEI	13/03/07

OWNER **PRM** PACIFIC RICHFIELD MARINE PTE LTD

BUILDER **PRM SHIPBUILDING PTE LTD**
HULL No. 633,635 & 636

KENTON MARINE
Kenton Marine Singapore Pte Ltd
No.10 Bukit Batok Crescent
#13-03 The Straits
Singapore 658079
Phone : +65 6467 1322
Fax : +65 6466 5325
E-Mail : info@kenton.com.sg

PROJECT **63.0M AHTS.**
CLASS: ABS-A1 FIRE FIGHTING CLASS 1, DPS-1* AMS, TOWING AND OFFSHORE SUPPORT VESSEL*
TITLE **GENERAL ARRANGEMENT**

DATE :-	20.07.06	SCALE :-	1 : 125
DRAWN BY :-	LEI	PROJECT NO :-	J15620
CHECKED BY :-		DRAWING NO :-	5620-G101